This analysis shows how the Government and Binding (GB) framework of Chomsky may be extended to the focus antipassive construction in K'iche', a Mayan language spoken in the central highland region of Guatemala. The GB model previously has been successfully extended to a number of Romance languages and has shown that a wide range of differences among the languages may be due to variation among a limited set of parameters. At first sight, an antipassive construction appears to contradict the GB account of passives because it affects an internal rather than an external verb argument. It is shown that the GB framework can be extended naturally to account for the focus antipassive in K'iche'. The analysis leaves the ergative nature of the syntactic operation firmly in place; it applies only to the subjects of transitive verbs. Contains 14 references. (LB)
THE FOCUS ANTIPASSIVE IN K'ICHE' MAYAN

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Abstract: My purpose in this paper is to show how the Government and Binding framework of Chomsky (1981) can be extended to the focus antipassive construction in K'iche' Mayan. At first sight an antipassive construction would appear to contradict the GB account of passives. It affects an internal rather than an external verb argument. I show that the GB framework can be extended naturally to account for the focus antipassive in K'iche'.

K'iche' is a Mayan language spoken in the central highland region of Guatemala. There is substantial descriptive literature on K'iche' grammar (Dayley 1981, Kaufman 1977, Larsen & Norman 1979, Mondloch 1978, 1981, Norman 1978, Smith-Stark 1978, Trechsel 1982), but little formal analysis has been done. Perhaps the language's most notable feature is its ergative morphology which unlike other ergative languages remains exceptionless throughout the various combinations of person, aspect and clause type. Ergativity may even extend to some aspects of K'iche' syntax although not all linguists working on the language agree.

My purpose in this paper is to show how the Government and Binding framework of Chomsky (1981) may be extended to the focus antipassive construction in K'iche'. The GB model has been successfully extended to a number of Romance languages with the interesting consequence that a wide range of differences between the languages may be due to variation among a limited set of parameters. To my knowledge, however, no one except Larsen (1987) has attempted to analyze an antipassive construction within the GB framework.

At first sight an antipassive construction would seem to contradict the GB description of passives. The explanation of passives in GB such as that in (1a) assumes the underlying structure shown in (1b).
(1a) John was kissed.
(b) e was kissed John.

GB theorists assume that the passive suffix on the verb absorbs the agent θ-role so that no referential NP may be generated within this position. The passive participle also becomes adjectival and fails to assign case to the following object NP. This NP must move to the subject position to receive case, but retains its θ-role from a coindexed trace in the [NP,VP] position (see Jaeggli 1986 for details).

K'iche' contains two distinct forms of passive as well as two forms of antipassive. The passive constructions in K'iche' divide naturally into a syntactic and a lexical passive (cf. Norman 1978). Mondloch (1981) labels the syntactic passive in K'iche' simply passivel, which is the term I will adopt. An example of passivel in K'iche' is shown in (2)1.

(2) x-0-q'alux ri: ak'al w-uma:l
PERF-3A-hug-PASS1 the child 1E-because

'The child was hugged by me.'

The underlying direct object (ri: ak'al) has become the subject as shown by the agreement morphology on the verb. The underlying subject has been demoted to an oblique phrase which is headed by the relational noun -uma:l. The verb has become morphologically intransitive since it only allows a subject agreement marker from the absolutive set of inflections. All of these changes can be explained in the standard way in GB theory.

An antipassive construction on the other hand operates in the opposite manner. Examples of focus antipassive constructions in K'iche' are shown in (3).

(3a) jachin x-0-poq'ow-isa-n ri: joro:n
who PERF-3A-boil-CAUSE-FOC_AP the water

'Who boiled the water?'
(b) k-0-in-ch'ob' ti: ixoq IMPERF-3A-1E-know the woman

[(ri) x-0-k'am-ow bi ri: si:] that PERF-3A-carry-FOC_AP here the firewood

'I know the woman who brought the firewood.'

(c) are: ri: at x-at-riq-ow ri: ak'al FOCUS the you PERF-2A-find-FOC_AP the child

'You were the one who found the child.'

In each of these examples the subject comes into focus in some way: either in a question as in (3a), a relative clause (3b) or in a sentence cleft (3c). The antipassive verb only has one person marker prefix and becomes morphologically intransitive as indicated by the presence of an intransitive termination marker when the verb occurs in clause-final position. Compare the antipassive construction in (4a) with the regular intransitive phrase in (4b) and the regular transitive phrase in (4c).

(4a) jachin k-0-ch'ay-ow-ik who IMPERF-3A-hit-FOC_AP-TERM

'Who hits?'

(b) jachin k-0-b'e:-ik who IMPERF-3A-go-TERM

'Who is going?'

(c) jas k-0-u:-riq-oh what IMPERF-3A-3E-found-TERM

'What did he find?'

Superficially, the focus antipassive construction appears to directly contradict current GB accounts of the passive. The passive suffix absorbs the agent 0-role and the verb becomes intransitive whereas the focus antipassive appears to absorb the patient 0-role to make the verb intransitive. Jaeggli's appeal to the distinction between external and internal 0-roles to explain the operation of the passive could not be maintained if a construction such as the focus antipassive showed it was possible for the internal 0-role to be absorbed rather than the external one.
Larsen (1987) argues that the focus antipassive in K'iche' does not absorb the internal 0-role. First an overt object NP can freely appear in focus antipassive constructions (cf. the examples in 2), one indication that the verb still assigns a 0-role and case to the direct object position. Secondly, focus antipassive verbs sometimes agree with their object rather than the subject. The focus antipassive actually agrees with the NP that is highest on the hierarchy shown in (5).

(5) non-third person > 3pl > 3sg

An example of object agreement in the antipassive is shown in (6).

(6) jachin x-at-ch'ay-ow-ik
    who PERF-2A-hit-FOC_AP-TERM

'Who hit you?'

Thus, person and number features from the object NP must still be available to the verb at some level.

Larsen points out one other fact about the focus antipassive that will have to be accounted for. It is subject to the weak crossover phonomenon. In (7) the wh-phrase is not interpreted as being coreferential with the possessor of the object phrase.

(7) jachini x-0-ch'ay-ow
    who PERF-3A-hit-FOC_AP

    ri: rj-achala:1
    the his/her-relative

'Who hit his/her relative?'

Larsen explains this outcome by assuming the underlying structure shown in (8).

(8) [jachin: [PROi [INFL[[x-0-ch'ay-ow[e]]
   S'   S'   S   VP   VP   NP
   [ri: rj-achala:1 [e;]]][e;]]]
   NP   NP   NP

   [ri: rj-achala:1 [e;]] [e;]]
   NP   NP   NP
In Larsen's analysis PRO moves out of the leftmost NP position, which is assigned the agent role, into COMP, where it is un governed and is coindexed with jachin in a higher clause. He further assumes that there is no subject agreement inflection (SAGR) in INFL to assign case to the subject position [NP,S], so an overt NP may not appear there. An object agreement inflection (OAGR) remains in INFL, and assigns its case to the agreement marker which passes its case to the direct object NP. Since the leftmost subject NP and the possessor of the head of the object NP do not c-command each other, they cannot have the same referent.

This analysis faces a number of problems. First, it assumes that K'iche' verbs assign the agent 0-role to an NP in [NP,VP] position. This would abolish the distinction between internal and external arguments and thus undermine any account of passives in the language. Second, the analysis requires an arbitrary connection between the [NP,VP] position which receives the agent 0-role and the [NP,S] position which receives ergative case. Ordinary transitive verbs in K'iche' would require the subject NP to move from the [NP,VP] to the [NP,S] without any change in verb morphology. There is no explanation why the object NP in [NP,VP] position would be casemarked by the OAGR while the subject NP in [NP,VP] would not be casemarked by the SAGR. Third, his analysis may explain why the absolutive set of verb prefixes is used for the objects of transitive verbs and the subjects of intransitive, but it misses the fact that objects of transitive verbs have a theme 0-role while subjects of intransitive verbs have a different 0-role. Fourth, this analysis contradicts his analysis of another example of weak crossover in K'iche' shown in (9) (Larsen's example 25).

(9) jachin: x-0-u:-ch'ay ri: r1/-achalan:1
who PERF-3A-3E-hit the his/her-relative

'Who did his/her relative hit?'

Here the possessor of the direct object also has a different referent from the wh-phrase. Yet the underlying structure for (9) according to Larsen's final analysis would be that shown in (10).
In this case the subject NP (ri r-achala:1) would receive its 0-role from the verb and then move to the [NP,S] position to be casemarked by the SAGR. The wh-trace in the object position, however, would c-command the possessor of the subject NP when it was in its original position. Thus, Larsen's analysis predicts coreference between the wh-phrase and the possessor of the subject NP contrary to what K'iche' speakers state.

It therefore seems reasonable to look for another approach to analyzing the focus antipassive. I think the best solution would be to base generate the subject NP in [NP,S] position. This preserves the distinction between internal and external arguments and the different 0-role assignments for subjects and objects. It creates a problem in accounting for the different subject prefixes used with transitive and intransitive verbs which I will address presently. At this point, however, I want to discuss how this structure can account for the features of the focus antipassive that we have seen.

I will assume that the underlying structure of the focus antipassive question in (7), repeated below, is that shown in (11).

(7) jachini x-o-ch'ay-ow ri: r:-achala:1
who PERF-3A-hit-FOC_AP the his/her-relative

'Who hit his/her-relative?'

(11) [jachini [SAGR_OAGR [x-o-ch'ay-ow
S' S VP
[ri: r:-achala:1]] [e]]
NP NP

In this sentence, the antipassive suffix absorbs the agent 0-role in exactly the same way the passive suffix does. This being the case, the [NP,S] position remains empty. This empty category is governed by the SAGR inflection in INFL so no violation of the ECP occurs. In the focus antipassive construction, however, the OAGR inflection is retained and transmits case to the
object NP in [NP,VP] position. This means that the object NP is not free to move to the [NP,S] position since it would violate the Case Filter if it did so. There is no possibility of coreference between the possessor of the object NP and the subject NP because nothing occupies the subject NP position. The antipassive suffix transmits the agent 0-role to the wh-phrase by some mechanism which I haven't determined yet.

A similar analysis will account for Larson's other examples. The underlying structure for (9), repeated below, would be that shown in (12).

(9) jachint x-O-u:-ch'ay ri: ri/-; -achala:l
   who PERF-3A-3E-hit the his/her-relative
   'Who, did his/her, relative hit?'

(12) [jachint: [SAGR_OAGR [x-O-u:-ch'ay [t1]]]
    S'  S  VP  NP
    [ri: -achala:l]]
    NP

In this case a regular transitive verb assigns a 0-role and case to the subject NP. The possessor of the subject NP does not c-command the wh-trace in the direct object position so there is no possibility of coreference between them.

The sentence in (9) is actually ambiguous. Another possible interpretation would be 'Who, hit his/her, relative?'. Mondloch (1981:233-238) notes that sentences where the subject and possessor of the direct object are coreferent are exceptions to the requirement that the focus antipassive be used for subject focus. This fact would also be accounted for under my analysis. The underlying structure of the second interpretation for sentence (9) is shown in (13).

(13) [jachint: [SAGR_OAGR [x-O-u:-ch'ay
    S'  S  VP
    [ri: r1-achala:l] [t1]]]
    NP  NP

Here, the variable and the possessive marker are both free in the necessary environments, but the variable in
the subject position c-commands the possessive marker explaining their coreference. As I discussed above, there would be no possibility of a coreference interpretation in the focus antipassive because there would not be anything in the [NP,S] position.

The variable agreement of the verb in the focus antipassive must still be accounted for. I think Larsen's account (56-57) is essentially correct although there are a few details which must be changed to make it consistent with my analysis. Unlike Larsen, I assume that both the SAGR and OAGR inflections are still present in the focus antipassive. However, another consequence of the absorption of the agent θ-role is the removal of the subject prefix slot in the verb's morphology. The two person inflections must vie for the single remaining inflectional slot. This can only be accomplished if one of the inflections is zero or if it is one of the formal markers for second person which are enclitics that follow the verb. Since there is only a single remaining prefix position, a marker from the absolutive set will indicate whichever inflection wins the competition for this slot. This mechanism would allow the prefix morphology to be assigned independently of an NP's θ-role.

It is somewhat surprising that GB theory can illuminate so many features of the focus antipassive in K'iche'. Perhaps the most striking feature of this analysis is the way the antipassive may be assimilated to previous analyses of passives. My analysis, however, leaves the ergative nature of this syntactic operation firmly in place. It only applies to the subjects of transitive verbs.

NOTES

* I have relied primarily upon the K'iche' data in Larsen 1987 and Mondloch 1981 for this paper. It is consistent with my own data from speakers of K'iche' from Zunil.
I have altered Larsen's spellings to reflect the Zunil dialect with which I am the most familiar. All K'iche' words are shown in the practical orthography developed by the Proyecto Linguistico Francisco Marroquin (Kaufman 1976) with a single exception: the use of <'> rather than <?> for the glottal stop. The other orthographic symbols have their standard IPA values except: <tz> = /tʃ/, <ch> = /tʃ/, <b'> = /b/, <tz'> = /tʃ/, <ch'> = /tʃ'/, <x> = /ʃ/ /, <j> = /ʃ/. I use the colon (:) to indicate long vowels. I have also used the following morphological abbreviations: PERF = perfective aspect, IMPERF = imperfective aspect, 3A = third person singular absolutive person marker (what Mayanists refer to as 'set B'), 1E = first person singular ergative person marker (or 'set A'), CAUSE = causative, PASS = the passive suffix, FOC_AP = the focus antipassive suffix, TERM = the clause-final termination marker.


I have suppressed the full structure of the possessed NP since it is not relevant to my argument. It should be understood in this and the following examples that the possessed NP has an empty possessor NP node following it licensed by the possessive prefix on the head NP. The full structure of the possessed NP would be:

\[
[r_i [r_j-achala:1] [e_j]]
\]

NP N' NP

REFERENCES


